6. EDI IN THE PROCUREMENT PROCESS

As stated in previous sections of this document, EDI and EFT are most widely used by Federal agencies in the process of procuring and paying for goods and services. The Federal Acquisition Streamlining Act (FASA) of 1994 mandated the use of EDI for exchanging information with vendors, and agencies started to acquire and implement EDI within their procurement functions. While many of these agencies have been successful in implementing small pilot systems with a few of their vendors, the main barrier to the growth of EDI usage is the vast number of vendors with whom the government conducts business. Most agencies have been unable to get beyond pilot implementations, as they find that ramping up thousands of trading partners is a daunting task that they lack resources to undertake. This is further complicated by the fact that many of the vendors that the government deals with are technically unsophisticated, small businesses, that require a great deal of assistance to become EDI-capable.

In 1996, Congress passed the Federal Acquisition Reform Act (FARA), which states that all Federal agencies may use simplified acquisition procedures for purchases under $100,000 from August 26, 1996 onwards, but will have until December 31, 1999 to implement EC. While this has caused some agencies to put their EDI and EC programs on hold, others have realized that EDI offers them an excellent opportunity to reduce costs and streamline their procurement process, and are continuing their efforts to implement this technology.

This section presents some of the recent trends in the use of EDI and EFT in the Federal procurement process, and a recommended technical approach for implementing EC.

6.1. TRENDS IN THE USE OF FACNET

The Federal Acquisition Computer Network (FACNET) was described in detail in Section 5, Communication Networks. FACNET was seen as providing the Federal government with a simple means of reaching a larger vendor community and strengthening competition for goods and services procured by the different agencies. FASA mandated the use of FACNET, and only those agencies that complied were allowed to use simplified acquisition procedures for purchases between $50,000 and $100,000 in value.

FACNET provides agencies with a number of advantages. They receive an increased number of responses that are more competitively priced. In addition, agencies benefit from the reduction in paperwork, data entry effort, and mailing costs. Under the old process of contacting three sources to obtain adequate competition, agencies often had to follow up with the three sources to obtain responses. However, agencies that transmit RFQs through FACNET typically receive 10 to 50 responses, eliminating the need for any manual follow up actions. Also, as vendors are able to respond much faster, the incidence of late bids is expected to decrease.

However, agencies and vendors have encountered a number of problems in trying to exchange acquisition-related documents through FACNET. Some agencies and vendors have reported

that quotes that were sent through FACNET were not delivered to the agency, and award notifications were transmitted to the wrong party. In addition, agencies find that FACNET opens small procurement opportunities to bidders who are unknown to Contracting Officers and who do not perform adequately after the contract is awarded to them.

As a result of these problems and the terms of FARA, agencies are now increasingly using Value Added Networks (VANs) to communicate directly with their vendors, instead of using FACNET. In addition, the Federal Telecommunications Service (FTS2000) contract has been modified to include EDI network services, and agencies can now choose between two commercial VANs (AT&T and Sprint) under this contract.

6.2. CENTRAL CONTRACTOR REGISTRATION (CCR)

Central Contractor Registration (CCR) is a facility by which vendors can register to become Federal government trading partners, and receive and respond to Federal procurement opportunities via FACNET. Vendors use the ANSI X12 838, Trading Partner Profile, transaction set, to send basic information regarding themselves (e.g., name, address, SIC code, and banking information) to a single location, which accepts and maintains vendor information on behalf of all Federal agencies. In the future, it is anticipated that the CCR facility will also track vendor performance, and maintain centralized lists of suspended and debarred vendors that all Federal agencies can access.

CCR provides agencies with the advantage of accurate and up-to-date information on a large number of vendors. It also eliminates the need for vendors to contact each agency separately and provide them with the necessary information.

The Electronic Commerce Information Center (ECIC) provides assistance to vendors in registering with the CCR. Vendors can use their own software to create the 838, Trading Partner Profile, transaction set, or register through World Wide Web (WWW) pages provided by some of the FACNET-certified VANs such as Simplex. The Department of Defense (DoD) is also in the process of developing a means for vendors to register through its WWW home page, and to provide vendors with a diskette-based system that will allow them to fill out the required information using an electronic form and transmit it to the CCR facility.

Currently, there are approximately 2,600 vendors who have registered with the CCR. This only represents a small percentage of the 300,000 vendors who supply goods and services to the Federal government. However, given the uncertainties with the future use of FACNET and Federal EC, many of the CCR-related initiatives have been placed on hold. Agencies that are continuing to pursue the use of EDI for procurement-related activities are relying mainly upon information obtained directly from their vendors.

6.3. GSA ADVANTAGE!

In 1995, GSA established a World Wide Web site on the Internet and implemented the GSA Advantage! system. Authorized vendors can place catalogs of their products and price lists on

the GSA Advantage! Web site using 832, Price/Sales Catalog, and 864, Text Message, transaction sets transmitted to GSA via FACNET. Purchasers in Federal agencies can access GSA Advantage! and browse through the vendor catalogs. They can then download the information to their application systems, place an order online through GSA Advantage! or place an order thorough their own purchasing system. Orders that are placed thorough GSA Advantage! are transmitted to vendors as EDI transaction sets via FACNET. The vendor will ship the items to the appropriate agency and send an EDI invoice to GSA via FACNET, or charge the ordering agency's credit card if authorization has been granted by the agency. Agencies that choose to place their own orders can use either EDI or traditional paper documents.

To date, GSA has contacted vendors who have products on the following schedules and implemented them on the GSA Advantage! system:

- Schedule 70 A and 70 B, Computers/Software
- Schedule 58 V A, Disks, Media
- Schedule 56 IV A, Construction and Building Materials

GSA plans to contact vendors on the remaining 100+ schedules and transition them to the GSA Advantage! System during Fiscal Years 1997 and 1998.

In addition, GSA has developed a software package, GSA Advantage! In a Box, and started distributing it to agencies in August 1996. This software will enable agencies to browse through vendor catalogs and price lists, and order products, but will use a phone line to access the GSA Advantage! system, and not the Internet.

6.4. CREDIT CARD PURCHASES

The Federal government is currently promoting the use of government issued credit cards, known as International Merchants Purchase Action Card (IMPAC), for micro purchases (acquisitions under $2,500 in value), over the more traditional ordering methods, including EDI. This is an extremely significant occurrence, as micro purchases currently account for over 85% of the Federal government's buying activity.

EDI and EFT may be used effectively in receiving monthly statements from credit card companies, and issuing payments to them. The ANSI X12 811, Consolidated Invoice/Service Statement, was created specially for this type of transaction.

6.5. RECOMMENDED TECHNICAL COMPONENTS FOR THE ELECTRONIC COMMERCE MODEL

The technical components of EDI systems, application systems, EDI gateways, and networks, were discussed in earlier sections of this document. Given the uncertainties with the future use of FACNET and CCR, agencies have been seeking alternative technical paths for implementing EC.

This section presents a recommended technical approach to implementing EDI within the Federal procurement function.

- **Application Systems:** Agencies should select procurement, receiving, and financial management systems that have the capability to interface with EDI systems. They should, at the very least, be capable of sending data to and receiving data from the EDI gateway through file transfers. This will save agencies from having to make a substantial investment of financial and human resources in developing automated interfaces between application systems and their EDI gateways.

- **EDI Gateway:** If the volume of transactions in the procurement process is typically low, it is recommended that the agency install a PC-based EDI gateway, with a Pentium-based hardware platform and a high speed (28.8K) modem. If the agency has a large volume of procurement transactions, or wants to implement EDI for other functions, it should consider installing a more powerful UNIX or mainframe-based gateway.

- **Communications Networks:** It is recommended that agencies utilize a combination of communication network options for transmitting procurement-related documents, as described below:

  FACNET: FACNET should be used to broadcast RFQs that require competitive bids from a large vendor base.

  VANs: VANs should be used for direct communications with individual vendors.

  Internet: The Internet should be used for accessing vendor catalogs and price lists.

  These network options will provide an optimum combination of speed, reliability, and the ability to reach out to a large vendor community.

Exhibit 6-1, Recommended Components of an EC System, graphically depicts these components.